WHAT IS CLAIMED IS:

1. A method for decreasing the size of a frame of digital data from a first number of bits (LM) to a second number of bits (N), where the digital data comprising the frame is

5   ordered from a first bit to an LMth bit, the method comprising the steps of:

(a) Receiving the frame;

(b) Deleting LM-N bits from the frame in a single iteration through the data, thereby creating a reduced length frame, wherein the deleting step is

10   performed such that the distance between any two consecutive deleted bits within any group within a first subset of the frame is A bits, and the distance between any two consecutive deleted bits within any group within a second subset of the frame is B bits, where A is an integer greater than 0 and B is an integer greater than A, and where the first subset and the second subset

15   together form a plurality of consecutive bits;

(c) Further processing the reduced length frame in a digital communications system.

2. The method of claim 1 wherein the frame consists of the first subset and the second subset.

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3. The method of claim 1 wherein B=A+1.

4. The method of claim 1 wherein A is equal to D-1, where D is the greatest integer less

25   than LM/P, where P=LM-N.

5. The method of claim 1 wherein ~~each of~~ the first subset consists of the first N bits of the frame, where N is the length of the first subset.

6. The method of claim ~~Error! Reference source not found.~~ wherein the distance between

consecutive deleted bits alternates between A and B throughout at least a portion of the

5 frame.

7. The method of claim ~~Error! Reference source not found.~~ wherein the second plurality

of bits consists of a first plurality of groups, each with a third number of bits, and a

second plurality of groups, each with a fourth number of bits, wherein each group consists

of a plurality of bits deleted in order, wherein the first and second plurality of bits are

10 deleted according to a repeating sequence, the sequence consisting of all of the bits within

one of the first plurality of groups, one of the first plurality of bits, and all of the bits

within one of the second plurality of groups.

8. The method of claim 7 wherein:

15 the third number of bits is equal to the lower bound of a first real number, where

the first real number is equal to the number of bits within the second

plurality of bits divided by the number of bits within the first plurality of

bits; and

the fourth number of bits is equal to the third number of bits plus 1.

20 9. The method of claim 1 wherein the step of further processing the reduced length frame

comprises the step of interleaving the reduced length frame.

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